

11/23/2015

Step by Step Guide for Exchange Server 2016

MS Messaging Solution

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OVIWIN

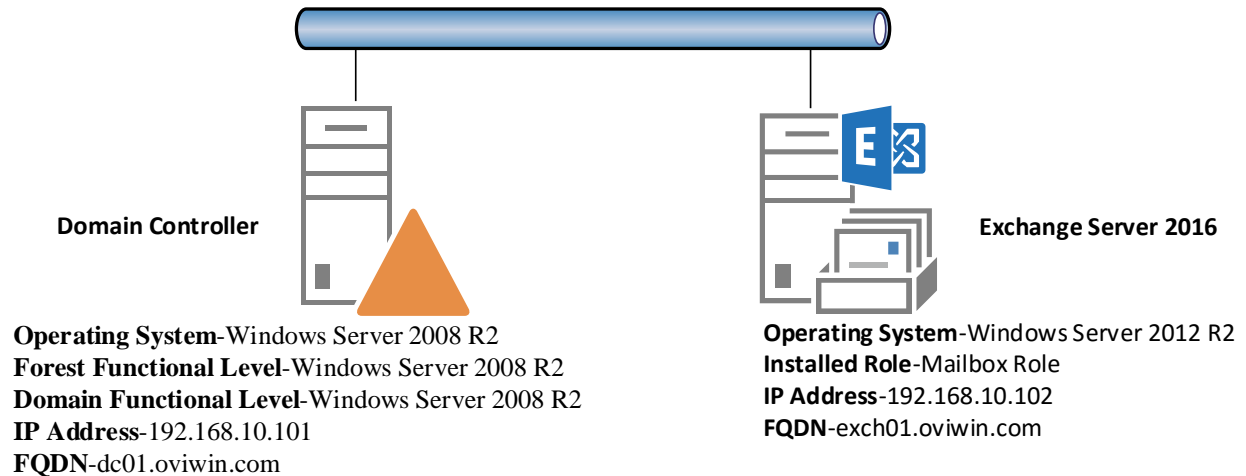
Step by Step Guide for Exchange Server 2016

Table of Contents

1. Operating System Support for Exchange Server 2016.....	2
2. Active Directory Preparation	2
3. Prerequisites for Mailbox Server Role	5
4. Prepare Active Directory and domains	7
Extend Active Directory Schema.....	7
Prepare Active Directory.....	8
Prepare Domains.....	8
5. Installing Exchange Server 2016	9
6. Configuring the URL for Exchange 2016	20
7. Internal DNS Records	28
8. Install a Valid SSL Certificate	28
9. Exchange Service Check	41
10. Create Mailbox Database.....	42
11. Create User Mailbox	44
12. Test Internal Mail flow	46
13. Outbound Mail Flow for Exchange Server 2016	46
14. Inbound Mail Flow for Exchange Server 2016	52
15. Configuring Accepted Domain	53
16. Configuring Email Address Policies	55

Step by Step Guide for Exchange Server 2016

The following section describes a step-by-step guide for the installation of Microsoft® Exchange Server 2016. The installation considers a single server deployment of Exchange Server 2016 with the Mailbox role. Additional details of the topology and architecture of the lab environment which was used in the installation is described here;



1. Operating System Support for Exchange Server 2016

The following operating systems are supported;

Component	Operating System
Mailbox and Edge Server Role	Windows Server 2012 R2 Standard or Datacenter
	Windows Server 2012 Standard or Datacenter
	Windows Server vNext
Management Tools	Windows Server 2012 R2 Standard or Datacenter
	Windows Server 2012 Standard or Datacenter
	64-bit edition of Windows 8.1

2. Active Directory Preparation

The first task in the installation of any version of Exchange is to prepare the Active Directory environment where the Exchange Server will be placed.

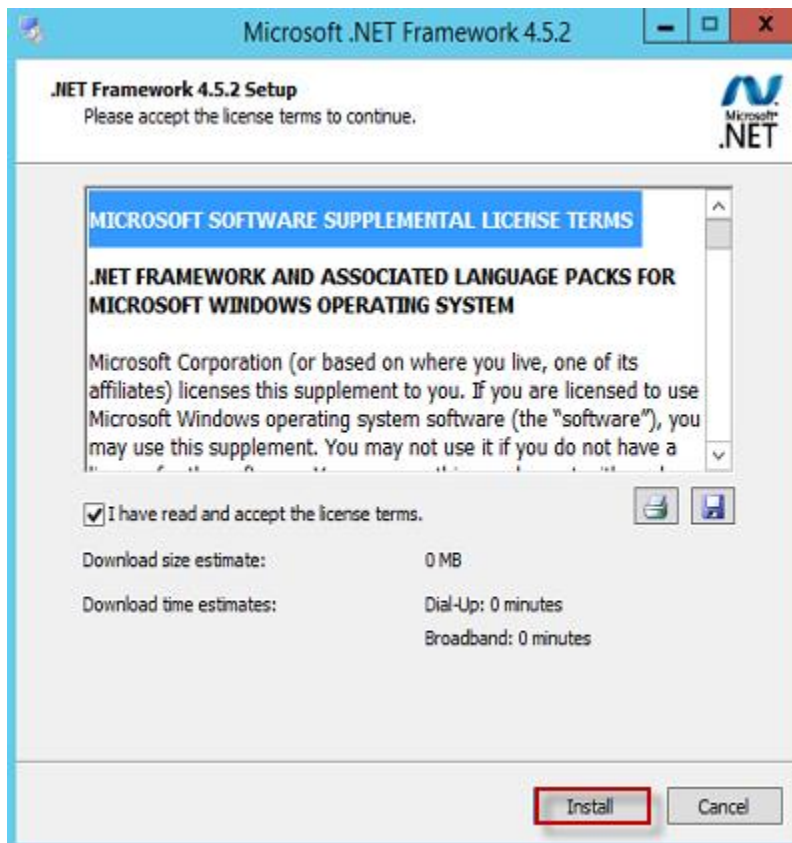
However, prior to the preparation, it should be checked against the following Network and Directory Server requirements;

Step by Step Guide for Exchange Server 2016

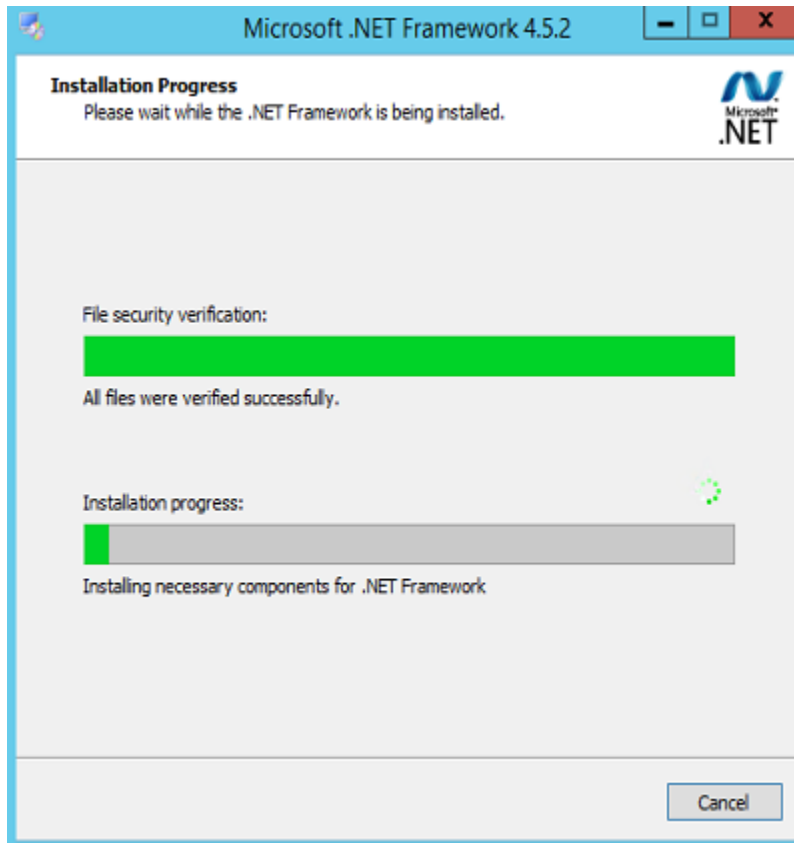
Component	Operating System
Domain controllers	Windows Server 2012 R2 Standard or Datacenter
	Windows Server 2012 R2 Standard or Datacenter
	Windows Server 2008 R2 Standard/Enterprise/Datacenter
	Windows Server 2008 Standard/Enterprise/Datacenter
Active Directory forest	Windows Server 2008 or higher

Once the above requirements are verified for consistency, proceed with the following preparation tasks on the server/computer which will be used to prepare the Active Directory using the Exchange Server 2016 Active Directory Prepare module.

Install Microsoft .Net Framework 4.5



Step by Step Guide for Exchange Server 2016



Step by Step Guide for Exchange Server 2016

Open Windows PowerShell and run the following command to install the Remote Tools Administration Pack.

Install-WindowsFeature RSAT-ADDS

```
PS C:\> Install-WindowsFeature RSAT-ADDS

Success Restart Needed Exit Code      Feature Result
-----
True     No             Success      {Remote Server Administration Tools, Activ...}
WARNING: Windows automatic updating is not enabled. To ensure that your newly-installed role or feature is automatically updated, turn on Windows Update.
```

3. Prerequisites for Mailbox Server Role

The following section instructs the prerequisite installation that should be performed in a server running a standalone Exchange 2016 server with the Mailbox Server Role.

Open a Windows PowerShell then Run the following command to install the required Windows components

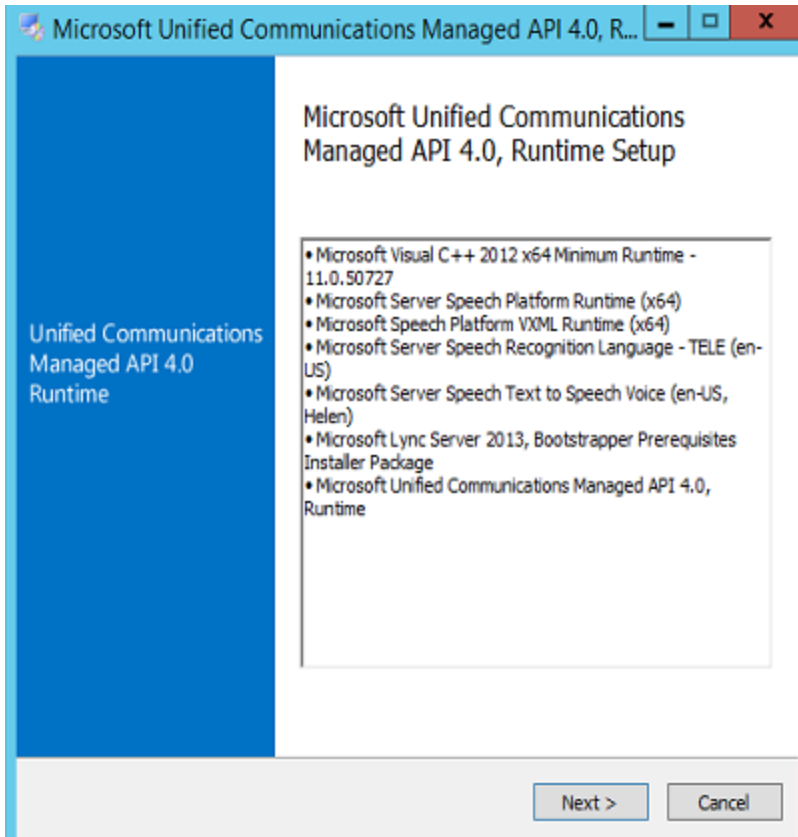
Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, RPC-over-HTTP-proxy, RSAT-Clustering, RSAT-Clustering-CmdInterface, RSAT-Clustering-Mgmt, RSAT-Clustering-PowerShell, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Basic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, Web-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Console, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server, Web-Stat-Compression, Web-Static-Content, Web-Windows-Auth, Web-WMI, Windows-Identity-Foundation

```
PS C:\> Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, RPC-over-HTTP-proxy, RSAT-Clustering, RSAT-Clustering-CmdInterface, RSAT-Clustering-Mgmt, RSAT-Clustering-PowerShell, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Basic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, Web-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Console, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server, Web-Stat-Compression, Web-Static-Content, Web-Windows-Auth, Web-WMI, Windows-Identity-Foundation

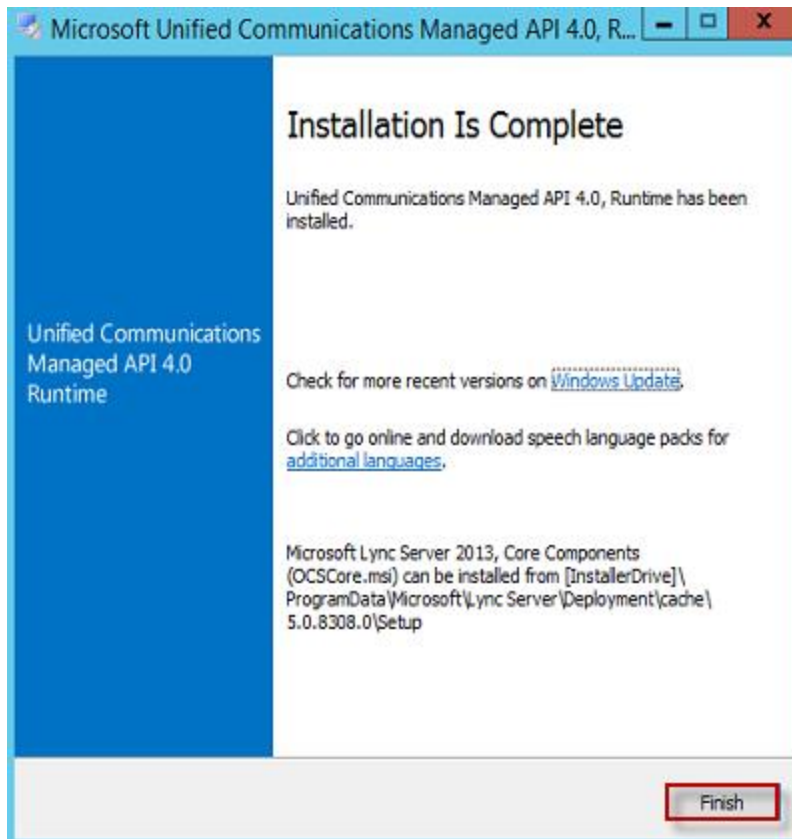
Success Restart Needed Exit Code      Feature Result
-----
True     Yes             SuccessRest... {Application Server, HTTP Activation, .NET...}
WARNING: You must restart this server to finish the installation process.
WARNING: Windows automatic updating is not enabled. To ensure that your newly-installed role or feature is automatically updated, turn on Windows Update.
```

Install Microsoft Unified Communications Managed API 4.0, Core Runtime 64-bit

Step by Step Guide for Exchange Server 2016



Step by Step Guide for Exchange Server 2016



4. Prepare Active Directory and domains

To prepare the active Directory and the Domains for Exchange 2016, follow the following steps. To execute the commands, the commands should be run using the Schema Admins group and the Enterprise Admins group membership

Extend Active Directory Schema

Mount the Exchange Server 2016 installation Media. Open up a Command Prompt session and navigate to the setup files from the command prompt. Type the following command followed by an Enter

Setup.exe /PrepareSchema /IAcceptExchangeServerLicenseTerms

Step by Step Guide for Exchange Server 2016

```
C:\Exchange 2016>Setup.exe /PrepareSchema /IAcceptExchangeServerLicenseTerms

Welcome to Microsoft Exchange Server 2016 Unattended Setup

Copying Files...
File copy complete.
Setup will now collect additional information needed for
installation.

Performing Microsoft Exchange Server Prerequisite Check

    Prerequisite Analysis                                COMPLETED

Configuring Microsoft Exchange Server

    Extending Active Directory schema                    COMPLETED

The Exchange Server setup operation completed successfully.
```

Prepare Active Directory

On the command prompt, run the following

Setup.exe /PrepareAD /OrganizationName:oviwin /IAcceptExchangeServerLicenseTerms

```
C:\Exchange 2016>Setup.exe /PrepareAD /OrganizationName:oviwin /IAcceptExchangeS
erverLicenseTerms

Welcome to Microsoft Exchange Server 2016 Unattended Setup

Copying Files...
File copy complete.
Setup will now collect additional information needed for
installation.

Performing Microsoft Exchange Server Prerequisite Check

    Prerequisite Analysis                                100%

Setup will prepare the organization for Exchange Server 2016 by using 'Setup
/PrepareAD'. No Exchange Server 2013 roles have been detected in this topology.
After this operation, you will not be able to install any Exchange Server 2013
roles.
For more information, visit: http://technet.microsoft.com/library\(EXCHG.160\)/ms.exch.setupreadiness.NoE15ServerWarning.aspx

Setup will prepare the organization for Exchange Server 2016 by using 'Setup
/PrepareAD'. No Exchange Server 2010 roles have been detected in this topology.
After this operation, you will not be able to install any Exchange Server 2010
roles.
For more information, visit: http://technet.microsoft.com/library\(EXCHG.160\)/ms.exch.setupreadiness.NoE14ServerWarning.aspx

Configuring Microsoft Exchange Server

    Organization Preparation                            COMPLETED

The Exchange Server setup operation completed successfully.
```

Prepare Domains

On the command prompt, run the following

Setup.exe /PrepareAllDomains /IAcceptExchangeServerLicenseTerms

Step by Step Guide for Exchange Server 2016

```
C:\Exchange 2016>Setup.exe /PrepareAllDomains /IAcceptExchangeServerLicenseTerms

Welcome to Microsoft Exchange Server 2016 Unattended Setup

Copying Files...
File copy complete.
Setup will now collect additional information needed for
installation.

Performing Microsoft Exchange Server Prerequisite Check
    Prerequisite Analysis                                COMPLETED
Configuring Microsoft Exchange Server
    Prepare Domain Progress                             COMPLETED

The Exchange Server setup operation completed successfully.
```

5. Installing Exchange Server 2016

The below section describes the installation of the Mailbox Server role for Exchange Server 2016.

If you're installing the first Exchange 2016 server in the organization, and the Active Directory preparation steps have not been performed, the account you use must have membership in the Enterprise Administrators group. If you haven't previously prepared the Active Directory Schema, the account must also be a member of the Schema Admins group.

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Check for Updates?

You can have Setup download Exchange Server 2016 updates from the Internet before you install Exchange. If updates are available, they'll be downloaded and used by Setup. By downloading updates now, you'll have the latest security and product updates. If you don't want to check for updates right now, or if you don't have access to the Internet, skip this step. If you skip this step, be sure to download and install any available updates after you've completed Setup.

Select one of the following options:

- Connect to the Internet and check for updates
- Don't check for updates right now

 Exchange

next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Introduction

Welcome to Microsoft Exchange Server 2016!

Exchange Server is designed to help you increase user productivity, keep your data safe, and provide you with the control you need. You can tailor your solution to your unique needs with flexible deployment options, including hybrid deployments that enable you to take advantage of both on-premises and online solutions. You can use compliance management features to protect against the loss of sensitive information and help with internal and regulatory compliance efforts. And, of course, your users will be able to access their email, calendar, and voice mail on virtually any device and from any location. This wizard will guide you through the installation of Exchange Server 2016.

Plan your Exchange Server 2016 deployment:

[Read about Exchange Server 2016](#)

[Read about supported languages](#)

[Use the Exchange Server Deployment Assistant](#)



next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP



License Agreement

Please read and accept the Exchange Server 2016 license agreement.

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT EXCHANGE SERVER 2016 STANDARD, ENTERPRISE, TRIAL AND HYBRID

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

By using the software, you accept these terms. If you do not accept them, do not use the software. Instead, return it to the retailer for a refund or credit. If you cannot obtain a refund there, contact Microsoft or

- I accept the terms in the license agreement
- I do not accept the terms in the license agreement.



next

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MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Recommended Settings

Use recommended settings

Exchange server will automatically check online for solutions when encountering errors and provide usage feedback to Microsoft to help improve future Exchange features.

Don't use recommended settings

Manually configure these settings after installation is complete (see help for more information).

[Read more about providing usage feedback to Microsoft](#)

[Read more about checking for error solutions online](#)



back

next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Server Role Selection

Select the Exchange server roles you want to install on this computer:

- Mailbox role
- Management tools
- Edge Transport role

Automatically install Windows Server roles and features that are required to install Exchange Server



back

next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Installation Space and Location

Disk space required: 8696.2 MB

Disk space available: 61337.4 MB

Specify the path for the Exchange Server installation:

D:\Program Files\Microsoft\Exchange Server\V15

browse

 Exchange

back

next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Malware Protection Settings

Malware scanning helps protect your messaging environment by detecting messages that may contain viruses or spyware. It can be turned off, replaced, or paired with other premium services for layered protection.

Malware scanning is enabled by default. However, you can disable it if you're using another product for malware scanning. If you choose to disable malware scanning now, you can enable it at any point after you've installed Exchange.

Disable malware scanning.

Yes

No

Internet access is required to download the latest anti-malware engine and definition updates.



back

next

Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP



Readiness Checks

The computer will be checked to verify that setup can continue.

Prerequisite Analysis

100%



Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Setup Progress

Step 2 of 14: Copy Exchange Files

34%



Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Setup Progress

Step 8 of 14: Mailbox role: Client Access service

74%



Step by Step Guide for Exchange Server 2016

MICROSOFT EXCHANGE SERVER 2016 SETUP

? X

Setup Completed

Congratulations! Setup has finished successfully. To complete the installation of Exchange Server 2016, reboot the computer.

You can view additional post-installation tasks online by clicking the link: <http://go.microsoft.com/fwlink/p?LinkId=255372>. You can also start the Exchange Administration Center after Setup is finished.

Launch Exchange Administration Center after finishing Exchange setup.

 Exchange

finish

6. Configuring the URL for Exchange 2016

When you first install Exchange Server 2016 it is pre-configured with default URLs for the various HTTPS services such as OWA (Outlook on the web), ActiveSync (mobile device access), Exchange Web Services (the API used for a variety of client communications), and others.

The default URLs contain the fully qualified domain name of the server. So for example if your server name is “**exch01.oiviwin.com**” then the default URL for OWA will be “**https://exch01.oiviwin.com/owa**”.

Step by Step Guide for Exchange Server 2016

These default URLs allow the services to function but they are not suitable for production deployments for several reasons such as:

- They are difficult for end users to remember (this primarily impacts Outlook on the web, where users tend to find it easier to remember a URL such as “**mail.ovwin.com**”)
- A URL containing a specific server name can’t be load-balanced across multiple servers in a high availability deployment
- The internal AD namespace for many organizations is not a valid domain name on the internet, for example **ovwin.local**, which makes it impossible to acquire SSL certificates for Exchange 2016.

The recommended practice is to change the URLs configured on your Exchange 2016 servers to aliases or generic host names such as “**mail.ovwin.com**” after you first install the server.

```
Get-ClientAccessService -Identity EXCH01 | Select AutodiscoverServiceInternalUri
```

```
Set-ClientAccessService -Identity EXCH01 -AutoDiscoverServiceInternalUri https://mail.ovwin.com/Autodiscover/Autodiscover.xml
```

```
[PS] C:\Windows\system32>Get-ClientAccessService -Identity EXCH01 | Select AutodiscoverServiceInternalUri
AutodiscoverServiceInternalUri
-----
https://exch01.ovwin.com/Autodiscover/Autodiscover.xml

[PS] C:\Windows\system32>cd\
[PS] C:\>
[PS] C:\>
[PS] C:\>
[PS] C:\>
[PS] C:\>
[PS] C:\>Set-ClientAccessService -Identity EXCH01 -AutoDiscoverServiceInternalUri https://mail.ovwin.com/Autodiscover/A
utodiscover.xml
[PS] C:\>Get-ClientAccessService -Identity EXCH01 | Select AutodiscoverServiceInternalUri
AutodiscoverServiceInternalUri
-----
https://mail.ovwin.com/Autodiscover/Autodiscover.xml
```

Step by Step Guide for Exchange Server 2016

Exchange admin center

recipients

permissions

compliance management

organization

protection

mail flow

mobile

public folders

unified messaging

servers

hybrid

tools

servers databases database availability groups **virtual directories** certificates

Select server: All servers
Select type: All



NAME	SERVER	TYPE	VERSION	LAST MODIFIED TIME
Autodiscover (Default Web Site)	EXCH01	Autodis...	Version 15.1 (Build 225.42)	11/23/2015 1:41 PM
ecp (Default Web Site)	EXCH01	ECP	Version 15.1 (Build 225.42)	11/23/2015 4:04 PM
EWS (Default Web Site)	EXCH01	EWS	Version 15.1 (Build 225.42)	11/23/2015 1:41 PM
Microsoft-Server-ActiveSync (Def...	EXCH01	EAS	Version 15.1 (Build 225.42)	11/23/2015 1:41 PM
OAB (Default Web Site)	EXCH01	OAB	Version 15.1 (Build 225.42)	11/23/2015 1:42 PM
owa (Default Web Site)	EXCH01	OWA	Version 15.1 (Build 225.42)	11/23/2015 1:41 PM
PowerShell (Default Web Site)	EXCH01	PowerS...	Version 15.1 (Build 225.42)	11/23/2015 1:42 PM

ecp (Default Web Site)
Website: Default Web Site
Authentication: Basic, FBA
External URL: https://mail.oviiwin.com/ecp

1 selected of 7 total

Virtual Directory - Mozilla Firefox

https://mail.oviiwin.com/ecp/VDDirMgmt/EditECPVDir.aspx?pwmcid=6&ReturnObjectType=1&id=72c7

ecp (Default Web Site)

general

authentication

Server:

EXCH01

Server version:

Version 15.1 (Build 225.42)

Website:

Default Web Site

Last modified time:

11/23/2015 4:04 PM

Internal URL:

https://mail.oviiwin.com/ecp

External URL:

https://mail.oviiwin.com/ecp

Save

Cancel

Step by Step Guide for Exchange Server 2016

Virtual Directory - Mozilla Firefox

https://mail.ovivin.com/ecp/VDirMgmt/EditEWSVDir.aspx?pwmcid=8&ReturnObjectType=1&id=c60c

EWS (Default Web Site)

general

authentication

Server:
EXCH01

Last modified time:
11/23/2015 1:41 PM

Internal URL:

External URL:

Enable MRS Proxy endpoint

Save Cancel

Step by Step Guide for Exchange Server 2016

Virtual Directory - Mozilla Firefox

https://mail.ovivin.com/ecp/VDirMgmt/EditEASVDir.aspx?pwmcid=11&ReturnObjectType=1&id=e2cd

Microsoft-Server-ActiveSync (Default Web Site)

general
authentication

Server:
EXCH01

Last modified time:
11/23/2015 1:41 PM

Internal URL:
https://mail.ovivin.com/Microsoft-Server-ActiveSync

External URL:
https://mail.ovivin.com/Microsoft-Server-ActiveSync

Save Cancel

Step by Step Guide for Exchange Server 2016

Virtual Directory - Mozilla Firefox

https://mail.ovwin.com/ecp/VDirMgmt/EditOABVDir.aspx?pwmcid=14&ReturnObjectType=1&id=afb

OAB (Default Web Site)

Server:

Last modified time:

Polling interval (minutes):

Internal URL:

This Internal URL refers to the URL from which Outlook clients inside the corporate network can access this virtual directory.

External URL:

This External URL refers to the URL from which Outlook clients outside the corporate network can access this virtual directory.

Step by Step Guide for Exchange Server 2016

Virtual Directory - Mozilla Firefox

https://mail.ovivin.com/ecp/VDirMgmt/EditOWAVDir.aspx?pwmcid=17&ReturnObjectType=1&id=car

owa (Default Web Site)

- general
- authentication
- features
- file access

Server: EXCH01

Server version: Version 15.1 (Build 225.42)

Website: Default Web Site

Outlook Web App version: Exchange2013

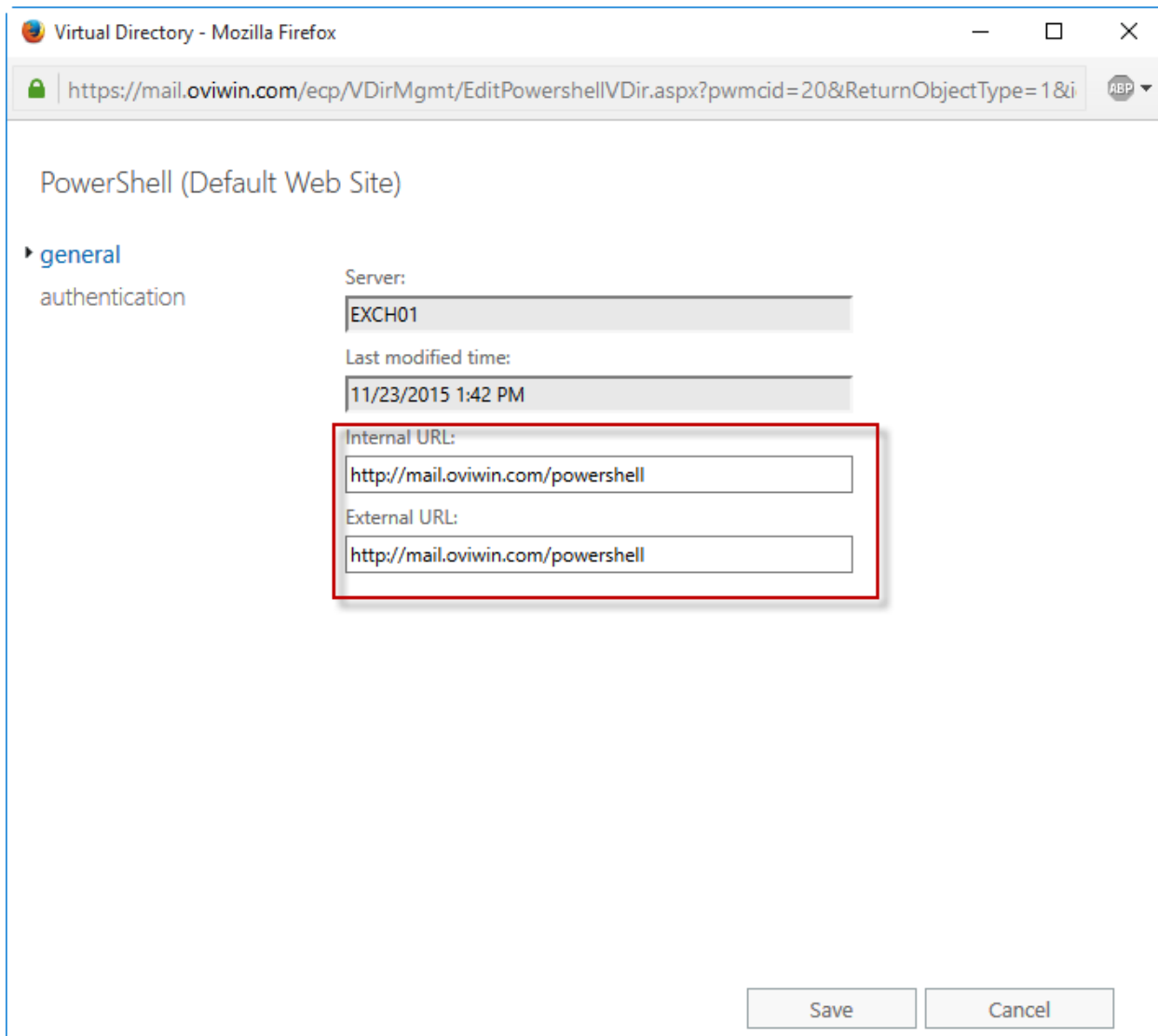
Last modified time: 11/23/2015 1:41 PM

Internal URL: https://mail.ovivin.com/owa

External URL: https://mail.ovivin.com/owa

Save Cancel

Step by Step Guide for Exchange Server 2016



Virtual Directory - Mozilla Firefox

https://mail.ovivin.com/ecp/VDirMgmt/EditPowerShellVDir.aspx?pwmcid=20&ReturnObjectType=1&i

PowerShell (Default Web Site)

general

authentication

Server:
EXCH01

Last modified time:
11/23/2015 1:42 PM

Internal URL:
http://mail.ovivin.com/powershell

External URL:
http://mail.ovivin.com/powershell

Save Cancel

Run the following command

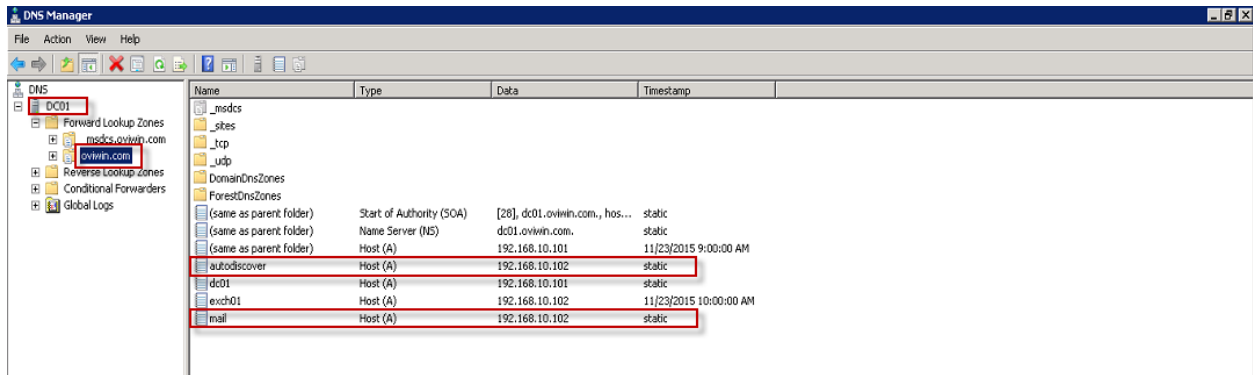
```
iisreset /stop
```

```
iisreset /start
```

```
[PS] C:\>iisreset /stop
Attempting stop...
Internet services successfully stopped
[PS] C:\>iisreset /start
Attempting start...
Internet services successfully started
```

Step by Step Guide for Exchange Server 2016

7. Internal DNS Records



8. Install a Valid SSL Certificate

Exchange Server 2016 communicates with clients, applications and other servers over a variety of network protocols such as HTTPS, SMTP, IMAP and POP. Much of this communication, particularly clients and applications, involves username and password-based authentication. When user credentials are sent over the network they are sent “in the clear”, meaning they can potentially be intercepted and read by an attacker. Other information transmitted during the session may also be sensitive and prone to abuse if interception was possible.

To secure these communications Exchange Server 2016 uses SSL certificates to encrypt the network traffic between the server, clients and applications. This includes:

- Outlook connecting to Outlook Anywhere (RPC-over-HTTP) or MAPI-over-HTTP
- Web browsers connecting to Outlook on the web (OWA)
- Mobile devices connecting to ActiveSync to access mailboxes and calendars
- Applications connecting to Exchange Web Services (EWS) for free/busy and other lookups
- Email clients connecting to secure POP or IMAP
- TLS encrypted SMTP between Exchange servers or other email servers

When Exchange Server 2016 is first installed it generates a self-signed SSL certificate that is then enabled for IIS (HTTPS services like OWA, EWS and ActiveSync), SMTP, POP and IMAP. The self-signed certificate allows the server to be “secure by default” and begin encrypting network communications right from the start, but it is only intended to be used temporarily while you provision the correct SSL certificates for your environment.

When deploying Exchange Server 2016 you should plan to replace the self-signed certificate with a valid SSL certificate for your deployment scenario. This involves an investment of anywhere from \$99 to several thousand dollars depending on your Client Access namespace scenario, the type of certificate you purchase, and which certificate authority you purchase it from.

If you’re tempted to stick with the self-signed certificate, or to try and disable SSL requirements on Exchange services, I strongly recommend you do not do those things.

Step by Step Guide for Exchange Server 2016

- Deliberately trying to reduce the security of your Exchange environment is unwise
- The hours you'll spend configuring and troubleshooting your attempted workarounds is more costly than just buying the correct SSL certificate
- Some stuff just flat out won't work if you try to work around SSL requirements

With the namespaces correctly configured, and DNS records in place, you will then need to provision an SSL certificate for the Exchange 2016 server.

Exchange admin center

recipients

permissions

compliance management

organization

protection

mail flow

mobile

public folders

unified messaging

servers

hybrid

servers databases database availability groups virtual directories **certificates**

Select server: exch01.oviiwin.com

+ / ✖ ↻ ...

NAME	STATUS	EXPIRES ON	
Microsoft Exchange Server Auth Certificate	Valid	10/27/2020	Microsoft Exchange Server Auth Certificate
Microsoft Exchange	Valid	11/23/2020	Self-signed certificate
WMSVC	Valid	11/20/2025	Issuer: CN=Microsoft Exchange Server Auth Certificate

Status

Valid

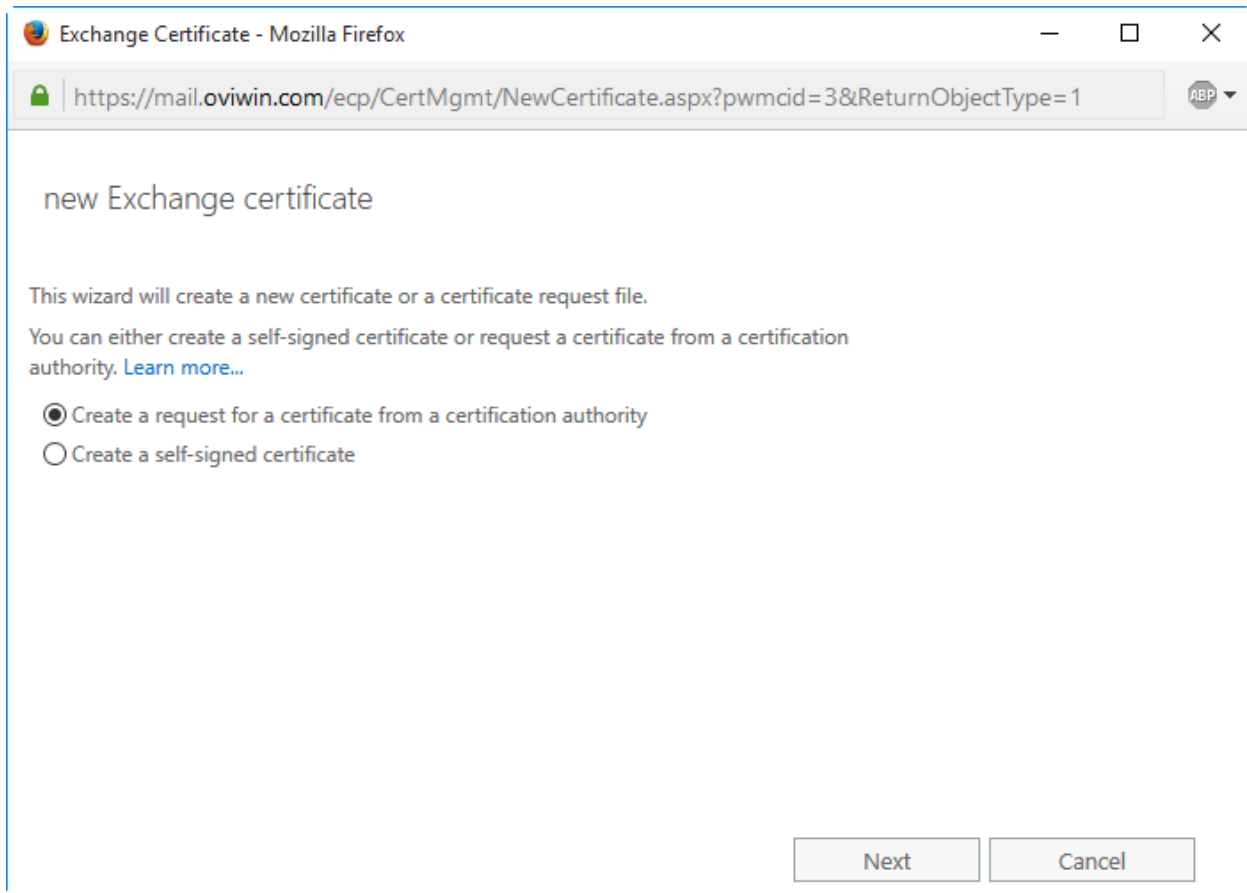
Expires on: 10/27/2020

[Renew](#)

Assigned to services

SMTP

Step by Step Guide for Exchange Server 2016



The screenshot shows a web browser window titled "Exchange Certificate - Mozilla Firefox". The address bar contains the URL: <https://mail.ovwin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=3&ReturnObjectType=1>. The page content is as follows:

new Exchange certificate

This wizard will create a new certificate or a certificate request file.
You can either create a self-signed certificate or request a certificate from a certification authority. [Learn more...](#)

Create a request for a certificate from a certification authority
 Create a self-signed certificate

At the bottom right, there are two buttons: "Next" and "Cancel".

Step by Step Guide for Exchange Server 2016

Exchange Certificate - Mozilla Firefox

https://mail.ovwin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=3&ReturnObjectType=1

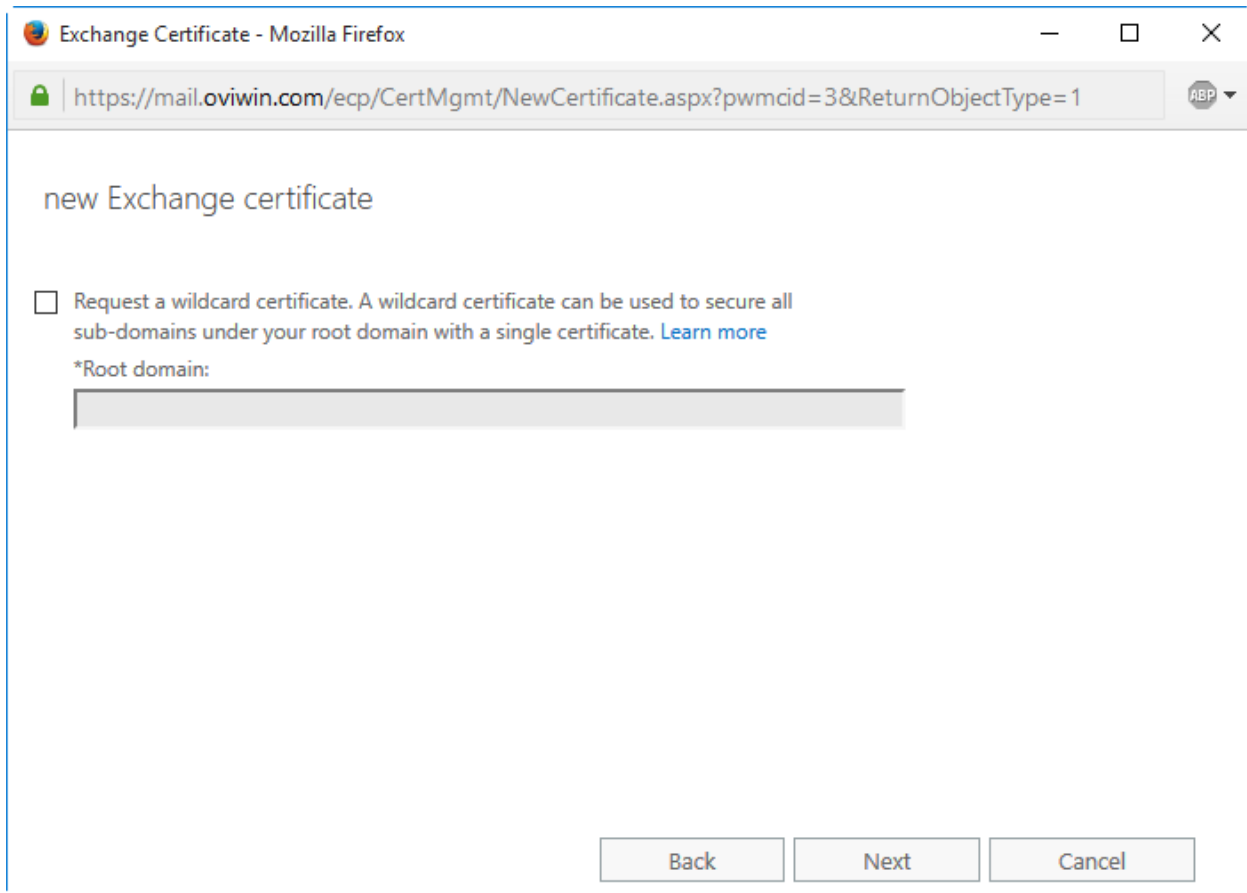
new Exchange certificate

*Friendly name for this certificate:

Exchange Certificate

Back Next Cancel

Step by Step Guide for Exchange Server 2016



Exchange Certificate - Mozilla Firefox

https://mail.ovivin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=3&ReturnObjectType=1

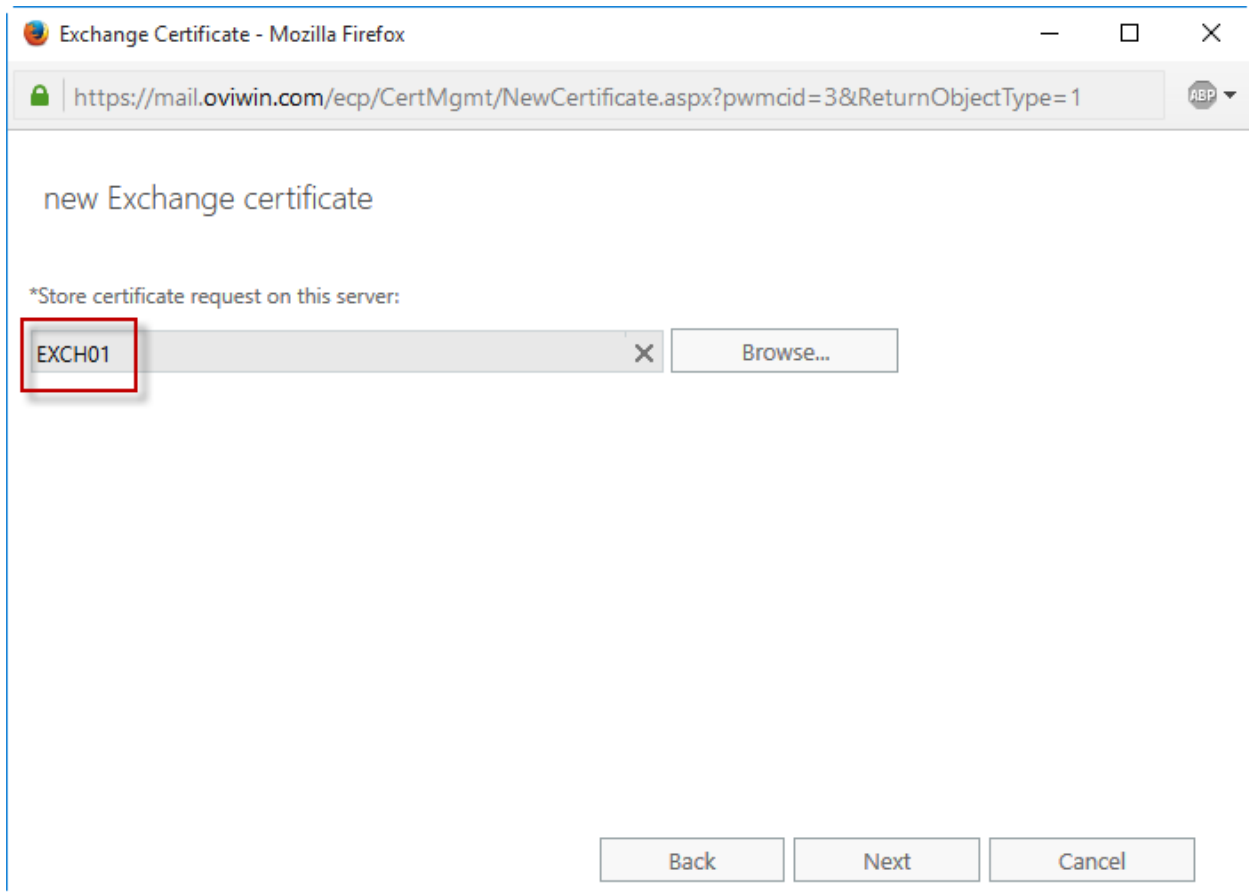
new Exchange certificate

Request a wildcard certificate. A wildcard certificate can be used to secure all sub-domains under your root domain with a single certificate. [Learn more](#)

*Root domain:

Back Next Cancel

Step by Step Guide for Exchange Server 2016



Step by Step Guide for Exchange Server 2016

Exchange Certificate - Mozilla Firefox

https://mail.ovivin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=4&ReturnObjectType=1

new Exchange certificate

Specify the domains you want to be included in your certificate. [Learn more](#)

ACCESS	DOMAIN	
Outlook Web App (when accessed from the Internet)	mail.ovivin.com	^
Outlook Web App (when accessed from the intranet)	mail.ovivin.com	
OAB (when accessed from the Internet)	mail.ovivin.com	
OAB (when accessed from the intranet)	mail.ovivin.com	
Exchange Web Services (when accessed from the Internet)	mail.ovivin.com	
Exchange Web Services (when accessed from the intranet)	mail.ovivin.com	
Exchange ActiveSync (when accessed from the Internet)	mail.ovivin.com	v

Back Next Cancel

Step by Step Guide for Exchange Server 2016

Exchange Certificate - Mozilla Firefox

https://mail.ovwin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=4&ReturnObjectType=1

new Exchange certificate

Based on your selections, the following domains will be included in your certificate. You can add additional domains here, or make changes. [Learn more](#)

+ ✎ - ✓

DOMAIN
mail.ovwin.com
autodiscover.ovwin.com

Back Next Cancel

Step by Step Guide for Exchange Server 2016

Exchange Certificate - Mozilla Firefox

https://mail.oviwon.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=4&ReturnObjectType=1

new Exchange certificate

Specify information about your organization. This is required by the certification authority.
[Learn more](#)

*Organization name:
OVIWIN TECHNOLOGIES LIMITED

*Department name:
INFORMATION TECHNOLOGY (IT)

*City/Locality:
DHAKA

*State/Province:
DHAKA

*Country/Region name:
Bangladesh

Back Next Cancel

Step by Step Guide for Exchange Server 2016

Exchange Certificate - Mozilla Firefox

https://mail.ovwin.com/ecp/CertMgmt/NewCertificate.aspx?pwmcid=4&ReturnObjectType=1

new Exchange certificate

*Save the certificate request to the following file (example: \\myservername\share\mycertrequest.REQ):

\\EXCH01\ExchCert\EXHCERT.REQ

You'll need to submit the contents of the file you entered to a certification authority.

After you receive the certificate file from the certification authority, you'll need to click Complete in the Information pane to install it on your Exchange server. [Learn more](#)

Back Finish Cancel

192.168.10.101/certsrv/

Microsoft Active Directory Certificate Services - ovwin-DC01-CA

Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

- [Request a certificate](#)
- [View the status of a pending certificate request](#)
- [Download a CA certificate, certificate chain, or CRL](#)

192.168.10.101/certsrv/certreq.asp

Microsoft Active Directory Certificate Services - ovwin-DC01-CA

Request a Certificate

Select the certificate type:

- [User Certificate](#)

Or, submit an [advanced certificate request](#).

Step by Step Guide for Exchange Server 2016

192.168.10.101/certsrv/certrqxt.asp

Microsoft Active Directory Certificate Services -- owin-DC01-CA

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded CMC or PKCS #10 certificate request or PKCS #7 renewal request generated by an external source (such as a Web server) in the Saved Request box.

Saved Request:

```
vgFw8600xItQa1kuEky1CeGLdLAY1/juKnNK75+
SuveXRrVZCbep6ME0m4jP/1b1XZe+f0228EmgPV
g3vgFXLbCRFX6EG/F755POn/y2WH59Fd7GZzsoF2
iBexTX1HwE1hpe1r/+cLew9fLa63ARhNg+Adk8md
eSdb6C00yQqcf3MSMYCUsT/111CVe1cfSE2F8NL5
-----END NEW CERTIFICATE REQUEST-----
```

Paste CSR here

Certificate Template:
Web Server

Additional Attributes:
Attributes:

Submit >

192.168.10.101/certsrv/certifnsh.asp

Microsoft Active Directory Certificate Services -- owin-DC01-CA

Certificate Issued

The certificate you requested was issued to you.

DER encoded or Base 64 encoded

[Download certificate](#)
[Download certificate chain](#)

Opening certnew.cer

You have chosen to open:

certnew.cer
which is: cer File (1.4 KB)
from: http://192.168.10.101

What should Firefox do with this file?

Open with [Browse...](#)

Save File

Do this automatically for files like this from now on.

OK Cancel

Step by Step Guide for Exchange Server 2016

Exchange admin center

recipients
permissions
compliance management
organization
protection
mail flow
mobile
public folders
unified messaging
servers

servers databases database availability groups virtual directories **certificates**

Select server:

+ ✎ 🗑️ ⌵ ...

NAME	STATUS	EXPIRES ON
Exchange Certificate	Pending request	11/23/2016
Microsoft Exchange Server Auth Certificate	Valid	10/27/2020
Microsoft Exchange	Valid	11/23/2020
WMSVC	Valid	11/20/2025

Exchange Certificate
Certification authority-signed certificate
Issuer: C=BD, S=DHAKA, L=DHAKA, O=OVIWIN TECHNOLOGIES LIMITED, OU=INFORMATION TECHNOLOGY (IT), CN=mail.ovivin.com

Status
Pending request
Expires on: 11/23/2016
Complete

Exchange Certificate - Mozilla Firefox

https://mail.ovivin.com/ecp/CertMgmt/CompleteCertificate.aspx?pwmcid=1&ReturnObjec

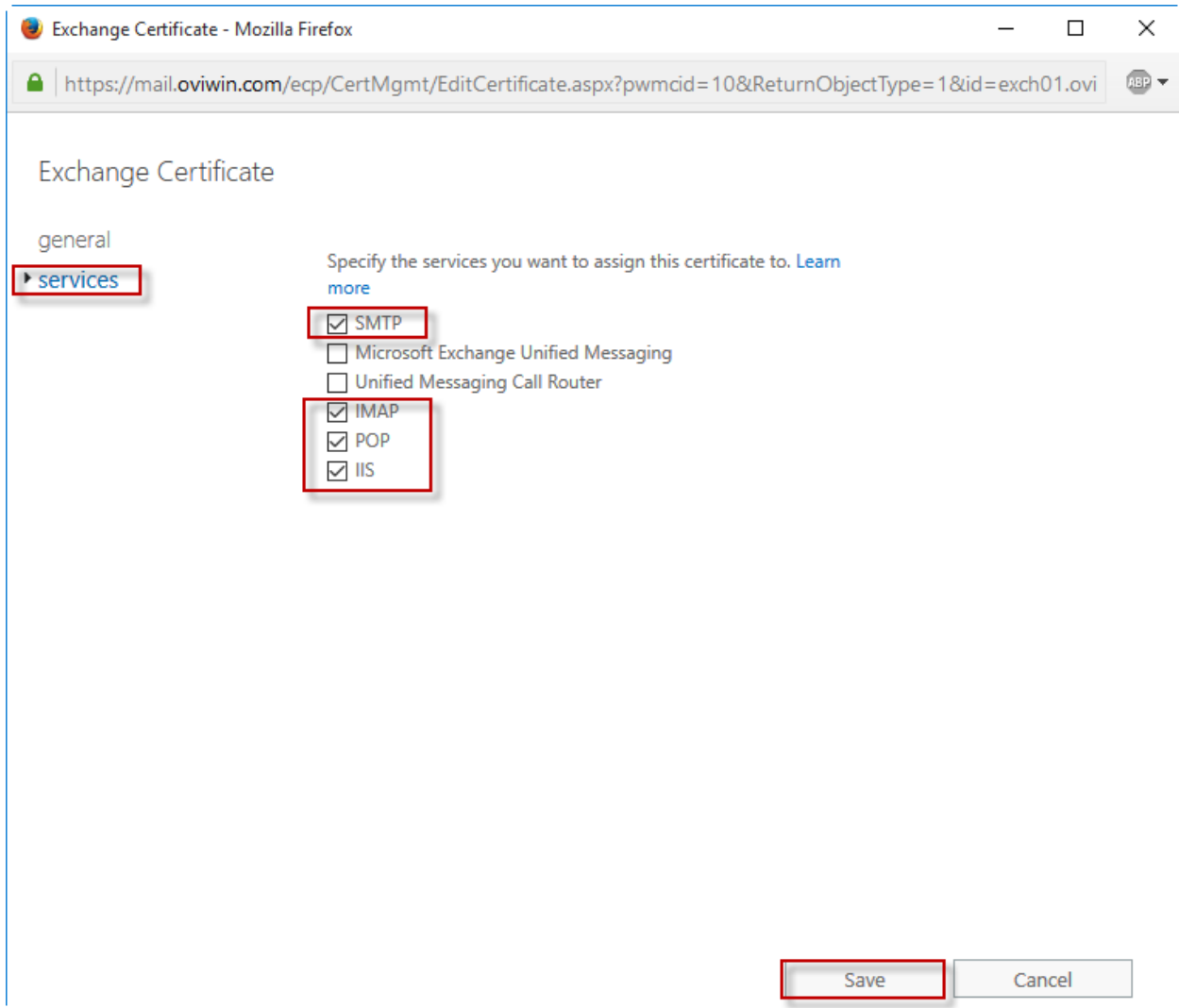
complete pending request

This will import the certificate file that you received from the certification authority. After it's imported, you can assign this certificate to various Exchange services. [Learn more](#)

*File to import from (example: \\server\folder\MyCertificate.CER):

OK Cancel

Step by Step Guide for Exchange Server 2016



warning

Overwrite the existing default SMTP certificate? Current certificate: 'A3CB6CBA0373039BD872C649220B738C045EFB68' (expires 11/23/2020 1:16:52 PM) Replace it with certificate: '68A5E66147C4B170F9650375259C181BDE72D7E3' (expires 11/22/2017 4:54:12 PM)



Run the following command

Step by Step Guide for Exchange Server 2016

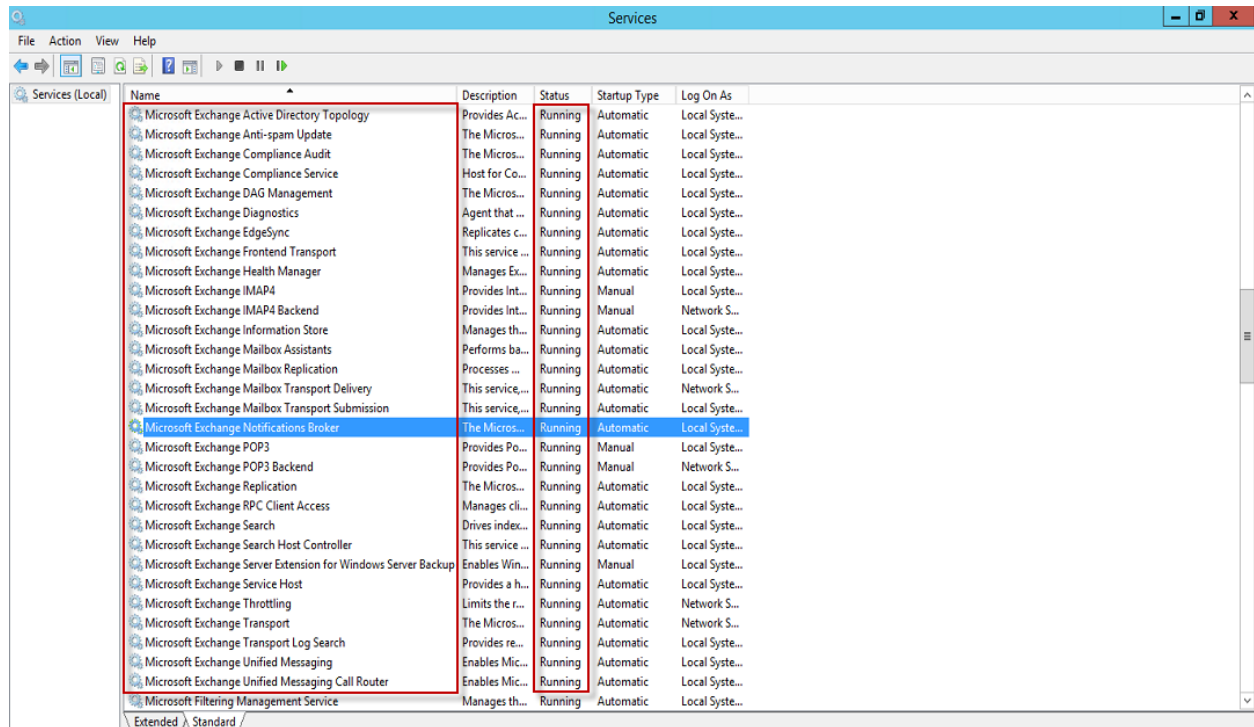
iisreset /stop

iisreset /start

```
[PS] C:\>iisreset /stop
Attempting stop...
Internet services successfully stopped
[PS] C:\>iisreset /start
Attempting start...
Internet services successfully started
```

The common causes of Outlook security alerts containing certificate warnings are misconfigured Exchange server namespaces, and invalid SSL certificates. Using the steps demonstrated above you can reconfigure your namespaces and/or install a valid SSL certificate. When your Exchange server's configuration has been corrected the Outlook security alerts should stop appearing for your end users.

9. Exchange Service Check



Step by Step Guide for Exchange Server 2016

10. Create Mailbox Database

Exchange admin center

- recipients
- permissions
- compliance management
- organization
- protection
- mail flow
- mobile
- public folders
- unified messaging

servers

servers **databases** database availability groups virtual directories certificates



NAME	ACTIVE ON SERV...	SERVERS WITH COPIES	STATUS	BAD COPY COUNT
Default Database	EXCH01	EXCH01	Mounted	0

Step by Step Guide for Exchange Server 2016

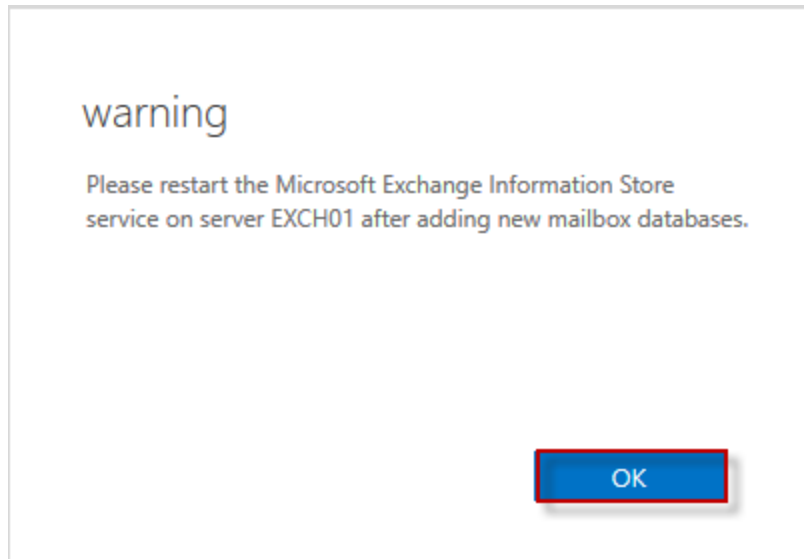
The screenshot shows a web browser window titled "Database - Mozilla Firefox" with the URL <https://mail.ovivin.com/ecp/DBMgmt/NewDatabase.aspx?pwmcid=5>. The page content is titled "new database".

Fields and options shown:

- *Mailbox database:
- *Server:
- Database file path:
- Log folder path:
- Mount this database

Buttons at the bottom:

Step by Step Guide for Exchange Server 2016



Name	Description	Status	Startup Type	Log On As
Message Queuing	Provides a ...	Running	Automatic	Network S...
Microsoft Account Sign-in Assistant	Enables use		Manual/Trig	Local Syste
Microsoft Exchange Active Directory Topology				
Microsoft Exchange Anti-spam Update				
Microsoft Exchange Compliance Audit				
Microsoft Exchange Compliance Service				
Microsoft Exchange DAG Management				
Microsoft Exchange Diagnostics				
Microsoft Exchange EdgeSync				
Microsoft Exchange Frontend Transport				
Microsoft Exchange Health Manager				
Microsoft Exchange IMAP4	Provides Int...	Running	Manual	Local Syste...
Microsoft Exchange IMAP4 Backend	Provides Int...	Running	Manual	Network S...
Microsoft Exchange Information Store	Manages th...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbox Assistants	Performs ba...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbox Replication	Processes ...	Running	Automatic	Local Syste...
Microsoft Exchange Mailbox Transport Delivery	This service,...	Running	Automatic	Network S...
Microsoft Exchange Mailbox Transport Submission	This service,...	Running	Automatic	Local Syste...
Microsoft Exchange Notifications Broker	The Micros...		Automatic	Local Syste...
Microsoft Exchange POP3	Provides Po...	Running	Manual	Local Syste...
Microsoft Exchange POP3 Backend	Provides Po...	Running	Manual	Network S...
Microsoft Exchange Replication	The Micros...	Running	Automatic	Local Syste...

Service Control

Windows is attempting to stop the following service on Local Computer...

Microsoft Exchange Information Store

Close

11. Create User Mailbox

Exchange admin center

recipients

permissions

compliance management

organization

protection

mailboxes groups resources contacts shared migration

+ - x y z

DISPLAY NAME	MAILBOX TYPE	EMAIL ADDRESS
Administrator	User	Administrator@oviwin.com

Step by Step Guide for Exchange Server 2016

User Mailbox - Mozilla Firefox

https://mail.ovivin.com/ecp/UsersGroups/NewMailboxOnPremises.as

new user mailbox

Alias:

Existing user

Md Shaifullah Mozide P X

New user

First name:

Initials:

Last name:

*Display name:

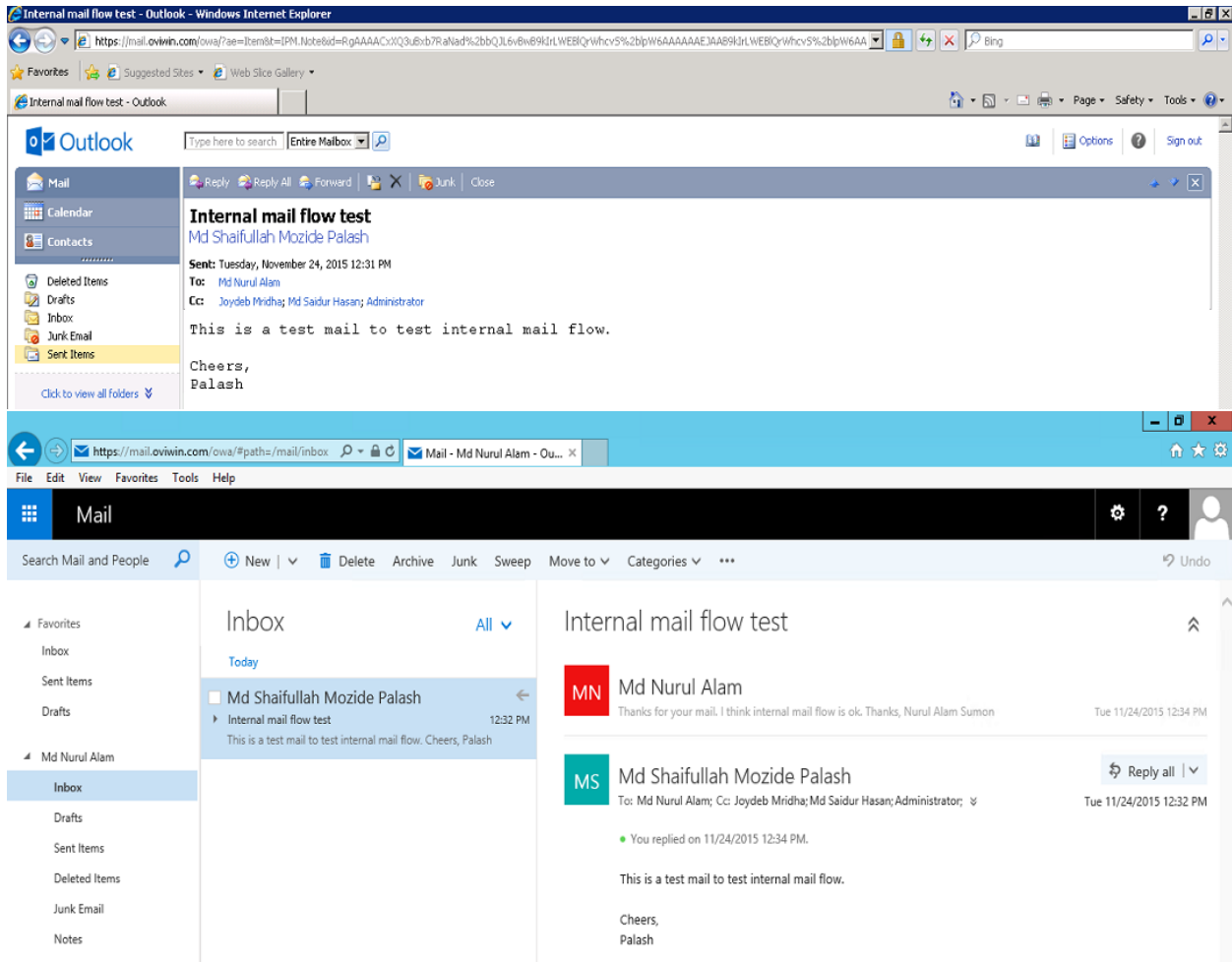
*Name:

Organizational unit:

*User logon name:

Step by Step Guide for Exchange Server 2016

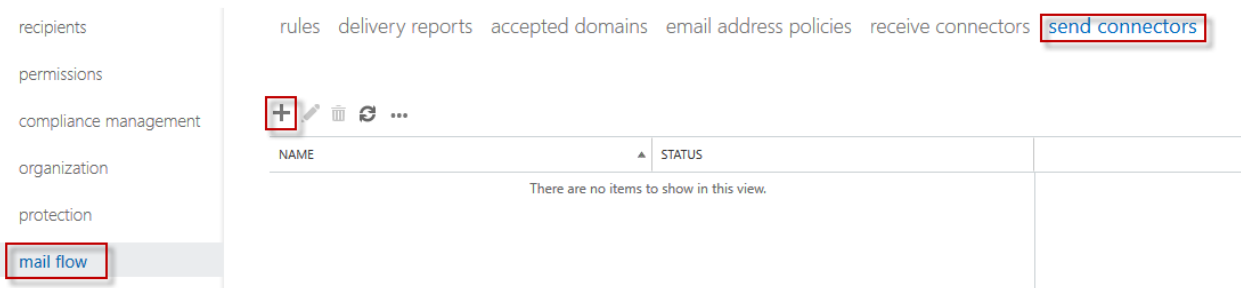
12. Test Internal Mail flow



13. Outbound Mail Flow for Exchange Server 2016

Send connectors control outgoing mail flow from your Exchange server. Every organization that needs to send email message to external recipients will need at least one send connector.

Exchange admin center



Step by Step Guide for Exchange Server 2016

Send Connector - Mozilla Firefox

https://mail.ovivwin.com/ecp/ConnectorMgmt/NewSendConnector.aspx?pwmcid=2&ReturnObjectTy

new send connector

Create a Send connector.

There are four types of send connectors. Each connector has different permissions and network settings. [Learn more...](#)

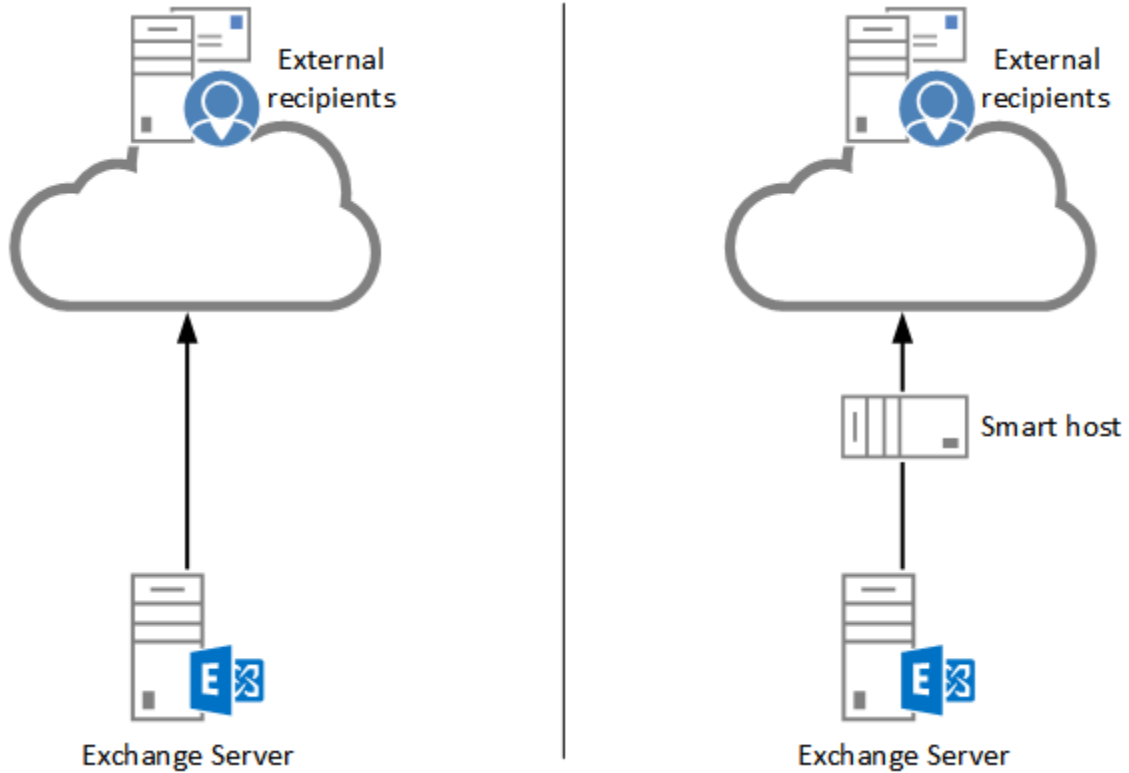
*Name:

Type:

- Custom (For example, to send mail to other non-Exchange servers)
- Internal (For example, to send intranet mail)
- Internet (For example, to send internet mail)
- Partner (For example, to route mail to trusted third-party servers)

Next you'll need to decide how the outbound emails will be delivered. There are two choices – by MX record, or via smart host. MX record delivery involves your Exchange server looking up the MX records of the recipient's domain in DNS, and then connecting directly to their email server via SMTP to deliver the email message. Smart host delivery involves your Exchange server sending the messages to a specified IP address or host name for another system (typically an email security appliance or cloud service) that is then responsible for the further delivery of that email message.

Step by Step Guide for Exchange Server 2016



For this example I'm going to use MX records to deliver the message. My server already has outbound firewall access on TCP port 25, and can resolve MX records on the internet using DNS, so at a basic level this should work fine. There are other considerations such as SPF and IP reputation in the real world that may impact the delivery of email messages from your server.

Step by Step Guide for Exchange Server 2016

Send Connector - Mozilla Firefox

https://mail.ovivin.com/ecp/ConnectorMgmt/NewSendConnector.aspx?pwmcid=2&ReturnObjectTy

new send connector

A send connector can route mail directly through DNS or redirect it to a smart host. [Learn more...](#)

*Network settings:
Specify how to send mail with this connector.

MX record associated with recipient domain

Route mail through smart hosts

+ ✎ -

SMART HOST

Use the external DNS lookup settings on servers with transport roles

Back Next Cancel

Set the address space for the send connector. An address space of “*” means “any domain” and is suitable if you have one send connector that is used for all outbound mail flow. You can use this address space option if you later need to configure specific send connectors for different domains.

Step by Step Guide for Exchange Server 2016

Send Connector - Mozilla Firefox

https://mail.oviw.in/ecp/ConnectorMgmt/NewSendConnector.aspx?pwmcid=2&ReturnObjectTy

new send connector

A Send connector routes mail to a specified list of domains. These domains can be an SMTP address space or a custom type. [Learn more...](#)

*Address space:
Specify the address space or spaces to which this connector will route mail.

+ ✎ -

TYPE	DOMAIN	COST
SMTP	*	1

Scoped send connector

Back Next Cancel

Step by Step Guide for Exchange Server 2016

Select a Server - Mozilla Firefox

https://mail.oviwins.com/ecp/ConnectorMgmt/ServerPicker.aspx?pwmcid=1&Launcher=Resu

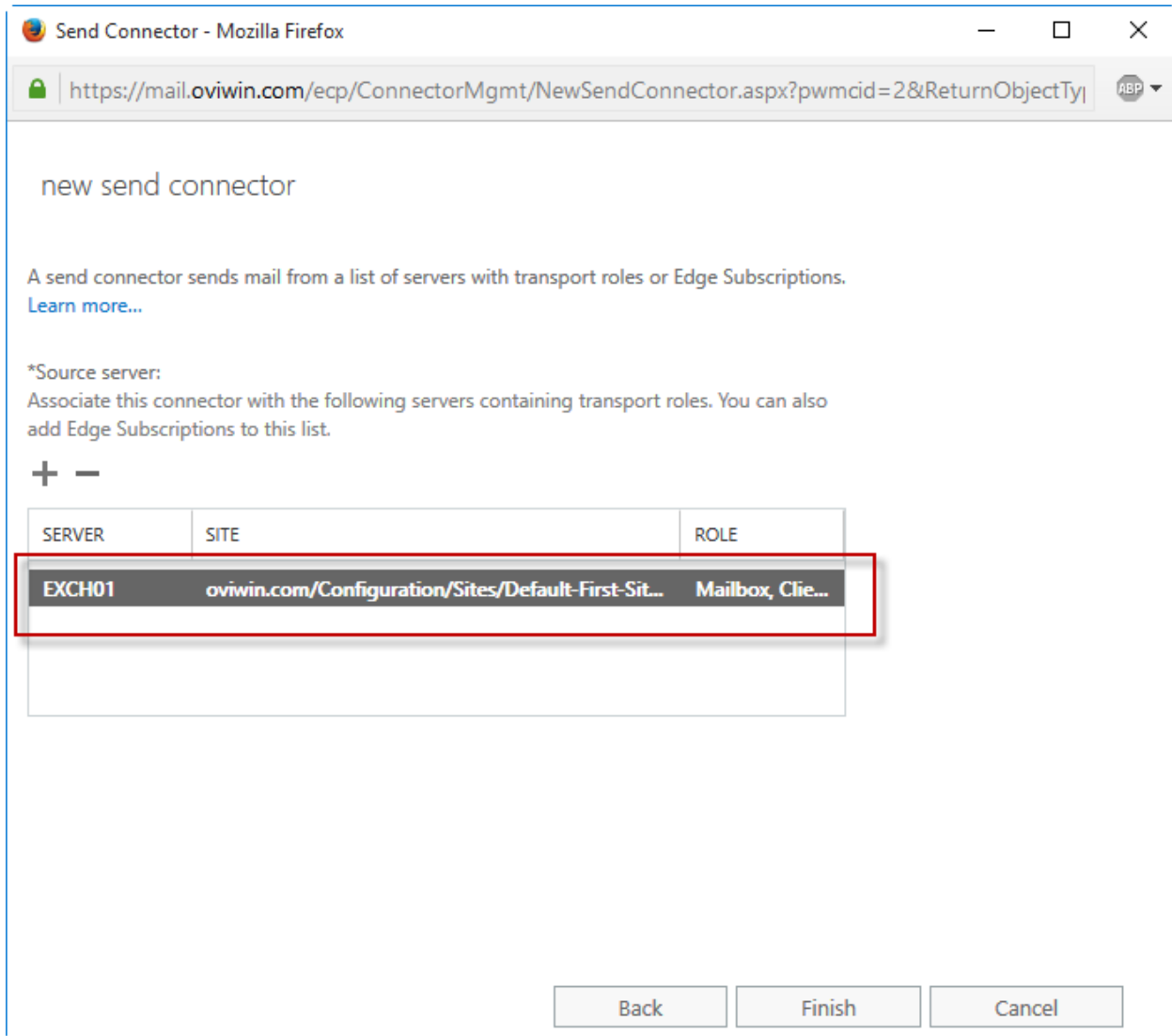
NAME	SITE	ROLE	VERSION
EXCH01	oviwin.com/Configuration/Sit...	Mailbox, ClientAccess	Version 15.1 (Buil...

1 selected of 1 total

add -> EXCH01 [remove];

OK Cancel

Step by Step Guide for Exchange Server 2016



new send connector

A send connector sends mail from a list of servers with transport roles or Edge Subscriptions. [Learn more...](#)

*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

+ -

SERVER	SITE	ROLE
EXCH01	oviwin.com/Configuration/Sites/Default-First-Sit...	Mailbox, Clie...

Back Finish Cancel

14. Inbound Mail Flow for Exchange Server 2016

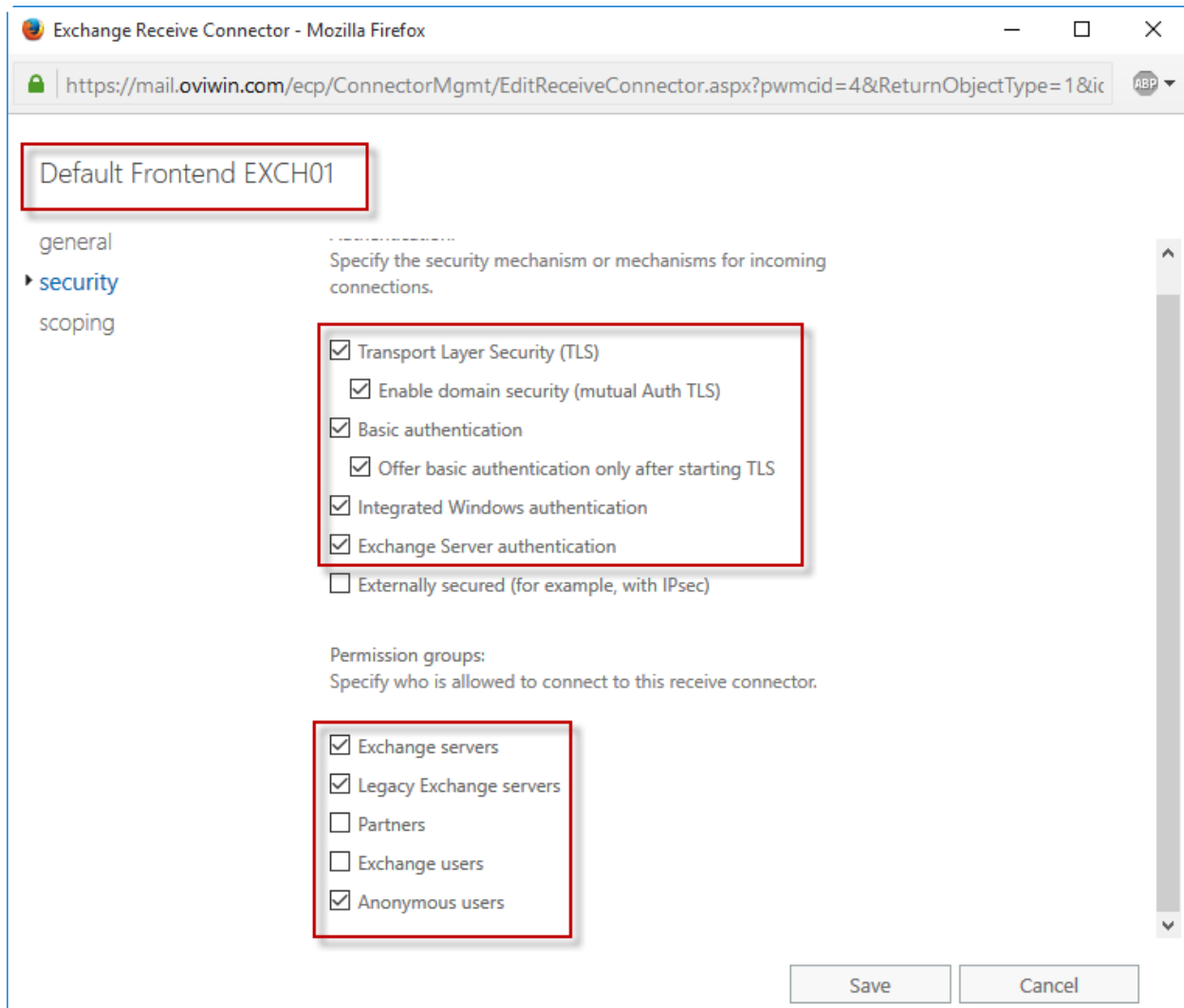
Configuring inbound mail flow for an Exchange Server 2016 environment is reasonably simple, however there are several different parts involved. For your server to receive email from the internet and deliver it to internal recipients there needs to be:

- An Accepted Domain configured for the organization
- An email address assigned to the recipient
- MX records in your public DNS zone
- SMTP connectivity from external senders to your Exchange server, or a mail route that leads to your Exchange server

The Exchange server will accept SMTP connections using a receive connector. A receive connector that is suitable for incoming email from the internet is pre-configured for you by Exchange setup,

Step by Step Guide for Exchange Server 2016

so there's no need for you to configure one yourself. The receive connector is named Default Frontend exch01.



If you look at the properties of that connector you might notice that "Anonymous Users" is enabled as a permission group. Yes this is the correct configuration for the connector, and no that does not mean it can be abused as an open relay.

15. Configuring Accepted Domain

Accepted domains define which domain names your Exchange servers will accept email for. When you install a new Exchange 2016 server the DNS name of the Active Directory forest is automatically added as an accepted domain for the Exchange organization. If your Active Directory forest DNS name happens to match the SMTP domain you plan to use for email, then there's no additional work required here. Similarly, if you're installing Exchange 2016 into an existing Exchange organization, the accepted domains are likely already configured.

Step by Step Guide for Exchange Server 2016

You can view your accepted domains in the Exchange Admin Center. Navigate to **mail flow** and then choose **accepted domains**. In my test environment the accepted domain of **oviwin.com** is already present.

Exchange admin center

recipients rules delivery reports **accepted domains** email address policies receive connectors send connectors

permissions

compliance management + [edit] [delete] [refresh]

NAME	ACCEPTED DOMAIN	DOMAIN TYPE
oviwin.com (default domain)	oviwin.com	Authoritative

oviwin.com

Fully qualified domain name: oviwin.com

Domain type: Authoritative

Accepted Domain - Mozilla Firefox

https://mail.oviwin.com/ecp/AcceptedDomain/EditAcceptedDomain.aspx?pwmcid=4&ReturnObjectTyp

oviwin.com

Accepted domains are used to define which domains will be accepted for inbound email routing.

*Name: oviwin.com

Accepted domain: oviwin.com

Specify a display name for the accepted domain.

This accepted domain is:

- Authoritative: Email is delivered only to valid recipients in this Exchange organization. All email for unknown recipients is rejected.
- Internal Relay: Email is delivered to recipients in this Exchange organization or relayed to an email server at another physical or logical location.
- External Relay: Email is relayed to an email server at another physical or logical location.

Make this the default domain.

Save Cancel

Notice the three options for the type of domain. The explanations are very clear, but to summarize:

Step by Step Guide for Exchange Server 2016

- **Authoritative** – a domain for which your servers host the only recipients. For most scenarios this will be the correct choice.
- **Internal relay** – a domain for which your servers host some, but not all of the recipients. A typical use case for this type of accepted domain is a shared SMTP namespace, which is often required when two companies are merging or separating.
- **External relay** – a domain for which your server receives email, but hosts none of the recipients.

16. Configuring Email Address Policies

Exchange admin center

recipients

permissions

compliance management

organization

protection

mail flow

mobile

public folders

unified messaging

rules delivery reports accepted domains **email address policies** receive connectors send connectors

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NAME	PRIORITY	STATUS	
Default Policy	Lowest	Applied	Default Policy Email Address Format SMTP Primary: @oviwin.com Includes All recipient types This email address policy has been applied.

Step by Step Guide for Exchange Server 2016

Default Policy

general

email address format

apply to

*Email address format:

+ ✎ -

TYPE	ADDRESS FORMAT
SMTP	@ovwin.com

Save Cancel

Step by Step Guide for Exchange Server 2016

The screenshot shows the Exchange Server 2016 management console. In the background, the 'Default Policy' page is visible with the 'email address format' tab selected. A table lists the address format type as 'SMTP' with the address format '@oviwin.com'. A modal dialog box titled 'Email Address Format' is open, showing the configuration options. The 'Select an accepted domain' dropdown is set to 'oviwin.com'. Under 'Email address format', the 'alias@contoso.com' option is selected. The 'Enter a custom address type' checkbox is checked, and 'SMTP' is entered in the text box. The 'Save' button in the dialog is highlighted with a red box.

Default Policy

general

email address format

apply to

*Email address format:

TYPE	ADDRESS FORM
SMTP	@oviwin.com

email address format

Select an accepted domain:
oviwin.com

Specify a custom domain name for the email address:

Email address format:
Example user: John Smith

alias@contoso.com

John.Smith@contoso.com

JSmith@contoso.com

JohnS@contoso.com

Smith.John@contoso.com

SJohn@contoso.com

SmithJ@contoso.com

Enter a custom address type

SMTP

If you don't want to use one of the pre-canned SMTP email address formats, you can specify a custom SMTP email address.
[Learn more](#)

Email address parameters:

Save Cancel

Save Cancel